

ork Order ID 72104

Tuesday, July 19, 2011 11:15:10 AM



Page 1

Item ID: D4072-1

Accept



Setup Start



Revision ID:

Item Name: Airframe Hinge

Stop



Start Date: 7/19/2011 Start Qty: 12.00

Required Date: 7/25/2011 Req'd Qty: 12.00



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

Date:

4-07-29

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Run Start



Stop



Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

Draw Nbr

Revision Nbr

D4072

B

100

Cut blanks as per folio

0.00



Bandsaw

Memo

0.00

Jeaspa Bandsaw

CUT 1.250" LONG

anh 11/09/27

36 0

105

0.00



HAAS 1

Memo

0.00

HAAS CNC vertical machine #1

Mill as per Dwg an Folio FA938

Dwg Rev: B

Folio Rev: AA

anh 11/09/29

36 0

Deburr

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 72104**

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Page 2

Item ID: D4072-1

Accept



Setup Start



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Stop



Item Name: Airframe Hinge

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

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Customer:

Reference:

Approvals:

Process Plan: \_\_\_\_\_

Date: \_\_\_\_\_

Tooling: \_\_\_\_\_

Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_

Date: \_\_\_\_\_

SPC (Y/N): \_\_\_\_\_

Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

.110



QC

Quality Control

QC2- Inspect parts off machine FAI/FAIB

0.00

Memo

0.00

OK 11/09/29

36

d

120



QC

Quality Control

QC8- Inspect parts - second check

0.00

Memo

0.00

B.A 11/09/29

36

d

150



HandFinish

Hand Finishing

Chemical Conversion Coat per QS1005 4.1

0.00

Memo

0.00

36

BR 11-9-30.

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 72104

Tuesday, July 19, 2011 11:15:10 AM



Page 3

Item ID: D4072-1	Accept		Setup	Start	
Revision ID:				Stop	
Item Name: Airframe Hinge					
Start Date: 7/19/2011	Start Qty: 12.00		Cust Item ID:		
Required Date: 7/25/2011	Req'd Qty: 12.00		Customer:		
Reference:					

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
160  Powdercoat Powder Coating m11 8434	White Gloss(Ref:4.3.5.2) per QS1005 4.3-Steel  Memo	0.00 Start Time: 7:30 Temp: 320 OF Finish Time: 8:00							36x Ø m-11/10/03
170  QC Quality Control	QC3- Inspect Part Finish  Memo	0.00 0.00							36 p 4/10/03 JH COUNT
180  Packaging Packaging	Identify as per dwg & Stock Location: <u>st</u> 100 Memo	0.00 0.00							11/10/03 (36)

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 72104**

Tuesday, July 19, 2011 11:15:10 AM



Page 4

Item ID: D4072-1

Accept



Setup Start



Revision ID:

Stop



Item Name: Airframe Hinge

Start Date: 7/19/2011 Start Qty: 12.00



Cust Item ID:

Required Date: 7/25/2011 Req'd Qty: 12.00



Customer:

Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start



QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/10/15

ME  
11-10-4

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



# Picklist Print

Tuesday, July 19, 2011 11:15:17 AM

Page 1

Work Order ID: 72104

Parent Item: D4072-1

Parent Item Name: Airframe Hinge



Start Date: 7/19/2011

Required Date: 7/25/2011

Start Qty: 12.00

Required Qty: 12.00

Comments: Ipp Rev:A New Issue 10-06-09 JLM Verified By:DD IPP  
REV:B DRAWING REV. CHANGE AS PER ECN 11-598 11-07-05 JFS  
VERIFIED BY:

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6B1.000X02.50 0		Purchased	No			100	f	33.7600	0.104	1.313684			



6061-T6 Bar 1.00 x 2.50



Location

Loc Qty

Loc Code

MAT004

33.76

→ 103019

5.76

103039

8

114993

20

3.94 *mf 11/09/27*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod.Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

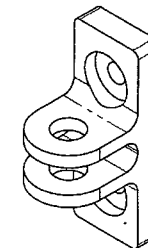
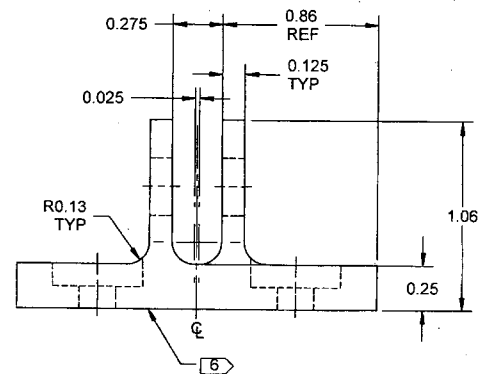
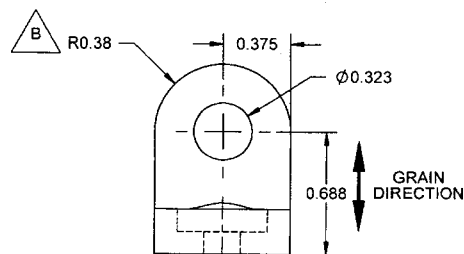
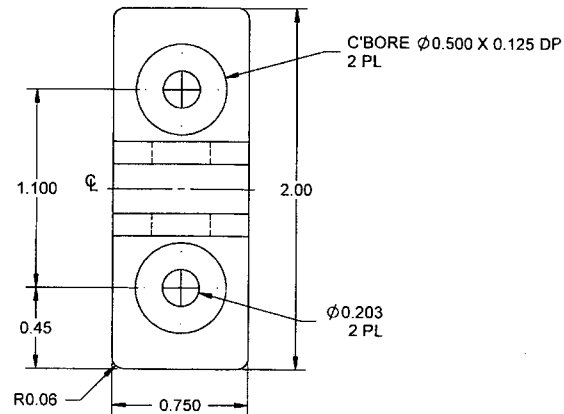
<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 72104
<b>Description:</b> Airframe Hinge		<b>Part Number:</b> D4072-1
<b>Inspection Dwg:</b> D4072 <b>Rev:</b> B		<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.500 x 0.125	+/-0.010	Ø.500 x .124	✓		Vern ML-DL	
2.00	+/-0.030	2.000	✓		"	
Ø0.203	+0.005/-0.001	Ø.204	✓		"	
0.750	+/-0.010	.750	✓		"	
R0.06	+/-0.030	R.0160	✓		"	
0.45	+/-0.030	.445	✓		"	
1.100	+/-0.010	1.100	✓		"	
R0.38	+/-0.030	R.380	✓		"	
0.375	+/-0.010	.373	✓		"	
0.688	+/-0.010	.685	✓		"	
0.275	+/-0.010	.274	✓		"	
R0.13	+/-0.030	R.130	✓		"	
0.25	+/-0.030	.250	✓		"	
1.06	+/-0.030	1.060	✓		"	
0.125	+/-0.010	.125	✓		"	
0.86	+/-0.030	.865	✓		"	
0.25	+/-0.030				"	
Ø0.323	+0.005/-0.001	Ø.325	✓		"	

<b>Measured by:</b> <i>cm</i>	<b>Audited by:</b> <i>h.a</i>	<b>Preliminary Approval:</b>
<b>Date:</b> 11/09/29	<b>Date:</b> 11/09/29	<b>Date:</b>

Rev	Date	Change	Revised by	Approved
A	11.06.26	New Issue	KJ <i>[Signature]</i>	<i>[Signature]</i>



SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT

WITHOUT NOTICE  
WORK ORDER

NO. 12104

11-07-19

RELEASED  
2011-06-30  
ANT

# **D4072-1 AIRFRAME HINGE**

## **NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMD 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6B
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT "WHITE" (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

B	CORRECT TYPO (ZN 87-1)	RF	10.11.02
A	NEW ISSUE	RF	10.09.16
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	RF	10.11.02
DRAWN	<i>[Signature]</i>	RF	10.11.02
CHECKED	<i>[Signature]</i>	RF	10.11.02
MFG. APPR.	<i>[Signature]</i>	RF	10.11.02
APPROVED	<i>[Signature]</i>	RF	10.11.02
DE APPR.	<i>[Signature]</i>	RF	10.11.02
DATE	10.11.02		

**DART AEROSPACE USA, INC.**  
PORT HADLOCK, WA

DRAWING NO. **D4072**

TITLE **AIRFRAME HINGE**

REV. B  
SHEET 1 OF 3

SCALE  
NTS

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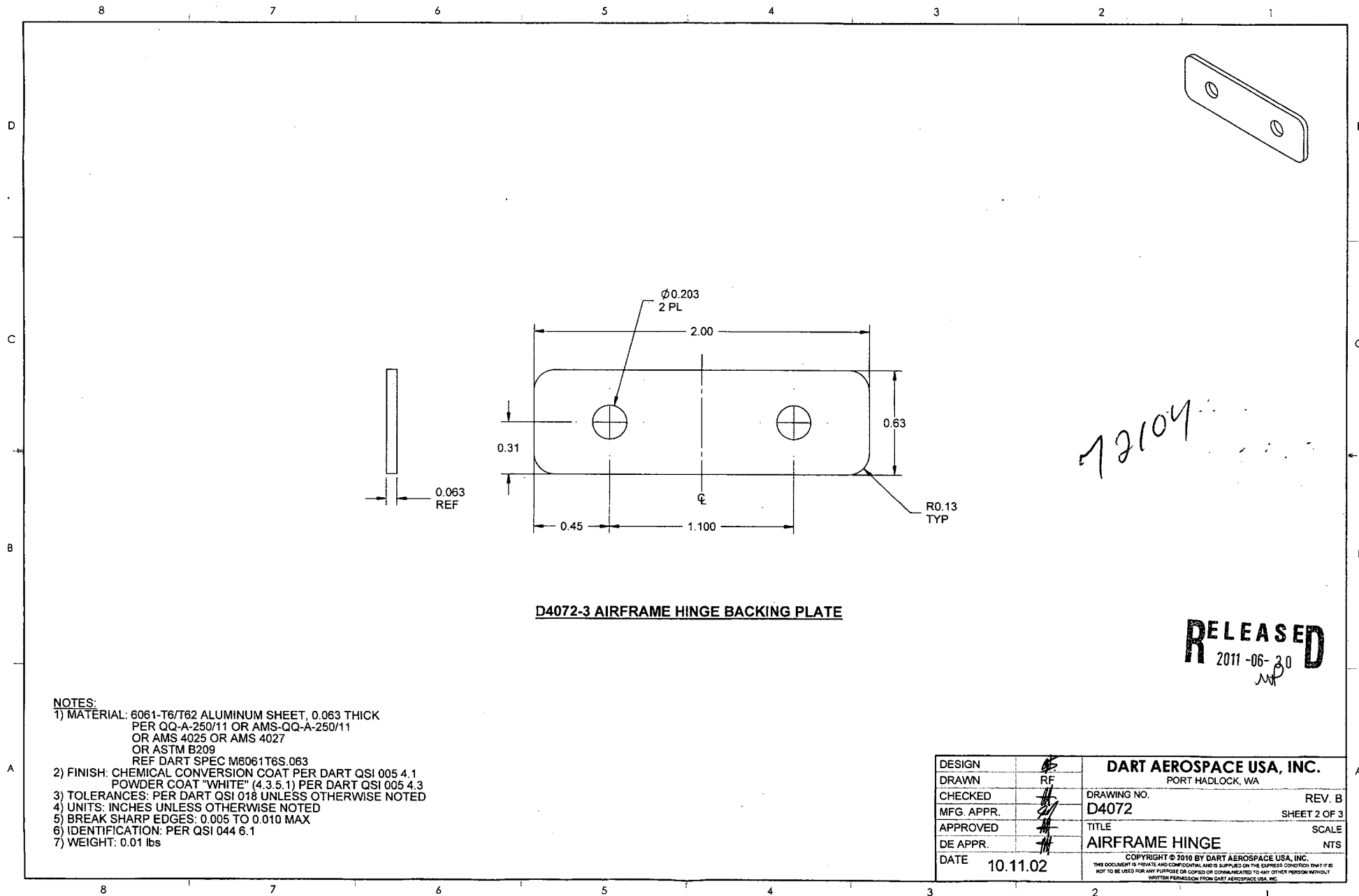
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



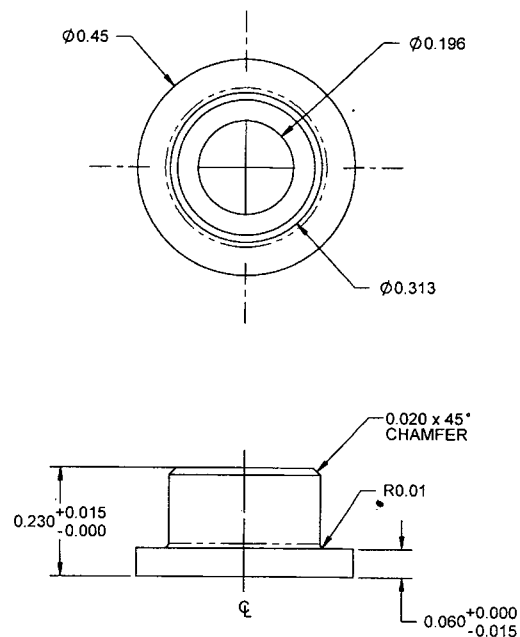
W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4072-5 BUSHING**

**NOTES:**

- 1) MATERIAL: AISI 303 STAINLESS STEEL BAR  
REF DART SPEC. M303B
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: PER QSI 044 6.1
- 7) WEIGHT: 0.004 lbs

DESIGN	RF	<b>DART AEROSPACE USA, INC.</b>	
DRAWN	RF	PORT HADLOCK, WA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. B
MFG. APPR.	<i>[Signature]</i>	<b>D4072</b>	SHEET 3 OF 3
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	<b>AIRFRAME HINGE</b>	NTS
DATE	<b>10.11.02</b>	<small>COPYRIGHT © 2010 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.</small>	

**RELEASED**  
2011-06-30  
*[Signature]*

*72104*



W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

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